

## Feature

### Basking to attention

Researchers are increasingly concerned that the needs of sharks be included in future marine conservation plans. **Nigel Williams** reports.

With growing concern about the prospects of many marine species, a report earlier this summer highlighted the plight of pelagic, open ocean sharks, which are increasingly under threat.

The International Union for the Conservation of Nature (IUCN) shark specialist group reported that 32 per cent of 64 species of open-sea sharks and rays are under threat of extinction.

"Despite mounting threats, sharks remain virtually unprotected on the high seas," says Sonja Fordham, deputy chair of the IUCN shark group and policy director for the conservation group Shark Alliance.

"The vulnerability and lengthy migrations of most open-ocean sharks call for coordinated international conservation plans. Our report documents serious overfishing of these species, in national and international waters, and demonstrates a clear need for immediate action on a global scale."

IUCN experts classified great hammerhead, scalloped hammerhead and giant devil rays as globally endangered. Smooth hammerhead, great white, basking and oceanic whitetip are classified as globally vulnerable to extinction.

Many open ocean sharks are taken mainly in high seas tuna and

swordfish fisheries. Once considered only incidental bycatch, these species are increasingly targeted because of new markets for shark meat and high demand for their fins in Asia.

There was some welcome, then, from the Shark Alliance regarding a meeting of government delegates at a summit in Spain of international tuna fishery managers who agreed on the need to take immediate action for sharks. "We are pleased that governments from around the world have at last acknowledged the pressing need for shark conservation measures on the high seas," said Fordham. "We underscore their agreement that improved enforcement of finning bans, protection for particularly depleted shark species, and concrete shark fishing controls



**Attraction:** The summer visit of basking sharks to north-western Europe is attracting growing numbers of tourists and heightened awareness of their vulnerability. (Photo: Dan Burton/Alamy.)

in line with scientific advice and the precautionary approach deserve immediate attention." It was against this backdrop of growing global concern about sharks, and heightened local interest in the increasing number of summer sightings of basking sharks off the coast of the Isle of Man, in the centre of the Irish Sea, that prompted the first international conference to further research and conservation on this species, hosted on the island earlier this month.

The basking shark is fully protected under Isle of Man (Manx) law but its summer appearance around the isle's shores and elsewhere in the Irish Sea represents only a brief and local appearance for this globally distributed species. One of the reasons behind the conference was the recent results from tagging experiments. A shark tagged with a satellite transmitter off the Isle of Man coast in 2007 was shown to have crossed the Atlantic, being recorded three months later off the coast of Newfoundland. Further research has shown that basking sharks from the east coast of North America migrate down to South American waters in winter. Not only was the basking shark globally distributed outside of the main tropical regions but researchers around the world might be seeing the same individual.

Jackie Hall, coordinator of the Manx Basking Shark Watch and voluntary marine officer for the Manx Wildlife Trust, said that this discovery made people realise the need for an international approach to research and conservation of basking sharks.

"It is crucial to obtain international collaboration to assess the status of basking sharks globally," she said. The conference drew researchers from the US, Canada, South Africa, New Zealand and the Seychelles as well as Europe. It was organised by the Manx government in conjunction with two wildlife charities, the Manx Wildlife Trust's Basking Shark Watch and the Save Our Seas Foundation.

"There is remarkable scope for international collaboration," Hall said. So little is known about these sharks that there is enormous potential in gleaning new data on their movement and genetics to bolster their conservation.

One of the great unknowns is where they breed, with no recent convincing evidence of basking sharks giving

birth. Fiona Gell, wildlife conservation officer at the Isle of Man's department of agriculture, fisheries and forestry, said that many young basking sharks had been recorded around the Isle of Man and elsewhere in the Irish Sea and what appeared to be courtship behaviour had also been observed, but direct evidence of breeding still remained elusive.

Another impetus to the conference was the possibility that the Isle of Man will create marine protection reserves which could help basking sharks, and Britain is also considering marine protection areas as part of its Marine Bill, which conservationists hope will come into law later this year.

Although marine protection areas will be considered on the basis of their value to a range of species, it is hoped that at least some of the sites will prove attractive to basking sharks. Although these sharks are plankton feeders, a healthy production of plankton can be seen as a marker of a productive marine environment.

---

### **The Isle of Man is a well-known basking shark 'hot spot' in summer with many sightings, particularly around its south-west coast.**

---

Another impetus to improved protection for the world's second largest fish, which can be more than 10 metres long and weigh several tonnes, is their growing tourist potential. They are increasingly seen by wildlife enthusiasts on the west coast of Britain. Watching them, as they come inshore in summer, is beginning to rival whale watching in popularity. The Isle of Man is a well-known basking shark 'hot spot' in summer with many sightings, particularly around its south-west coast.

While basking sharks may not face some of the threat of other species of open-ocean sharks while they are in inshore waters, they are, however, threatened by boat collisions, entanglement in fishing nets and in some parts of the world they are still hunted for their fins.

Lissa Goodwin, marine policy officer for the Wildlife Trusts said the meeting sought to identify conservation zones for the species. These might

be included in the marine nature reserves which will be set up around the coast of Britain under the Marine Bill currently going before parliament, likely to become a Marine Act later this year.

"There are definite threats to the basking shark in Britain, such as boat collisions and entanglement in nets, but we don't know what the level of threat is to the population as a whole, so we need to err on the side of caution," Goodwin said. "We need to identify the areas that are important to them for breeding and feeding."

Basking shark fins are still 'incredibly valuable' in the Far East, she said. There was once a basking shark fishery in Britain and Ireland but now the species is protected.

"The conference has stemmed from the realisation that basking sharks are a global species and we need to work together as partners around the world, to focus our conservation effort more closely," says Gell.

The Convention on Migratory Species which is already in place contains many of the elements needed to protect basking sharks, she says. "The problem comes with implementation." A priority is to reduce the bycatch of sharks, she says.

With the new acknowledgement by government officials of the need to further protect sharks in the international tuna fisheries, announced in Spain last month, there is renewed hope for protection of these species at the international level.

And highlighting the highly visible, tourist-friendly basking shark in the Irish Sea is also a way of encouraging conservation up from the local level.

The IUCN shark specialist group now calls on governments to set catch limits for sharks and rays based on scientific advice and the precautionary approach. It further urges governments to fully protect critically endangered and endangered species of sharks and rays, ensure an end to shark finning and improve the monitoring of fisheries taking sharks and rays, it says. "Governments should invest in shark and ray research and population assessment, minimize incidental bycatch of sharks and rays, employ wildlife treaties to complement fisheries management and facilitate cooperation among countries to conserve shared populations."